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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|--------------------------------------|--------------------|----------------------|--------------------------|-----------------|
| 10/016,844 | 12/14/2001 | Kevin Harris Becker | 1978.EEM | 8825 |
| 7590 03/30/2004 | | | EXAMINER | |
| Jane E. Gennaro | | | SELLERS, ROBERT E | |
| Assistant Gene | eral Counsel, I.P. | | | |
| NATIONAL STARCH AND CHEMICAL COMPANY | | | ART UNIT | PAPER NUMBER |
| 10 Finderne Avenue | | | 1712 | |
| Bridgewater, 1 | NJ 08807-0500 | | DATE 3 (A H ED 02/20/200 | |

DATE MAILED: 03/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| · | | | | | |
|---|---|---|--|--|--|
| | Application No. | Applicant(s) | | | |
| | 10/016,844 | BECKER ET AL. | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| | Robert Sellers | 1712 | | | |
| The MAILING DATE of this communication appreciation approach for Reply | pears on the cover sheet with the c | orrespondence address | | | |
| A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a repl If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b). | 136(a). In no event, however, may a reply be tim ly within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONED | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). | | | |
| Status | | | | | |
| 1) Responsive to communication(s) filed on <u>05 h</u> | March 2004. | | | | |
| 2a)⊠ This action is FINAL . 2b)☐ This | s action is non-final. | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| closed in accordance with the practice under the | Ex parte Quayle, 1935 C.D. 11, 45 | 53 O.G. 213. | | | |
| Disposition of Claims | | | | | |
| 4) Claim(s) 1-9 is/are pending in the application. 4a) Of the above claim(s) 8 and 9 is/are withdr 5) Claim(s) is/are allowed. 6) Claim(s) 1-7 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/o | | | | | |
| Application Papers | 10 | | | | |
| 9) The specification is objected to by the Examine | er. | | | | |
| 10) The drawing(s) filed on is/are: a) acc | cepted or b) \square objected to by the E | Examiner. | | | |
| Applicant may not request that any objection to the | drawing(s) be held in abeyance. See | ∋ 37 CFR 1.85(a). | | | |
| Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documen 2. Certified copies of the priority documen 3. Copies of the certified copies of the priority application from the International Burea * See the attached detailed Office action for a list. | ts have been received. ts have been received in Applicationity documents have been received au (PCT Rule 17.2(a)). | on No ed in this National Stage | | | |
| \$ | | | | | |
| Attachment(s) | Λ Π Interest 1 2 0 | (DTO 442) | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4) 🔲 Interview Summary Paper No(s)/Mail Da | | | | |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date <u>3/5/04</u> . | | atent Application (PTO-152) | | | |

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1. Claims 8 and 9 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected inventions, there being no allowable generic or linking claim. Election was made **with** traverse in the non-Final rejection mailed October 3, 2003 but the traversal has been rescinded in the amendment filed March 5, 2004.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

- 2. Claims 1-5 are rejected under 35 U.S.C. 102(a) as being anticipated by Satoh et al.
- 3. Claims 1 and 3-5 are rejected under 35 U.S.C. 102(a or b) as being anticipated by Capote et al. Patent No. 2001/0020071 or Japanese Patent Nos. 61-237436 or 55-65217 or Young Patent No. 4,816,531 or Jackson Patent No. 5,081,167.
- 4. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Satoh et al., Capote et al., Japanese '436 and '217, Young and Jackson in view of Roth et al. Patent No. 6,194,490 and Marshall et al. Patent No. 3,746,686 and Japanese Patent No. 57-100128.

The rejections are maintained for the reasons of record set forth in the previous Office action. The arguments presented in the amendment filed March 5, 2004 have been considered but are unpersuasive.

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- 5. The claims require the curing of the first composition at a lower curing temperature. The first composition includes a bismaleimide according to claim 1, line 3 which is employed in Satoh et al., Capote et al., Japanese '436 and '217, Young and Jackson. The second composition is defined as not curing during the curing of the first composition. The second composition contains an epoxy compound or resin according to claim 5 which is used in the aforementioned references.
- 6. The patents espouse the equivalent bismaleimides within the realm of the claimed first composition and equivalent epoxy compounds or resins within the parameters of the claimed second composition utilized in a B-staged adhesive wherein a lower temperature B-stages the composition and a higher temperature completes the cure. Since the epoxy compounds or resins of the references conform to the claimed second composition and lower and higher curing temperatures are set forth, the epoxy compounds or resins do not cure during the curing of the bismaleimide.
- Although none of the patents explicitly state that the epoxy compounds or resins do not cure during the lower curing temperature, there is no explicit statement that they do cure. The translation of Japanese '217 on page 3, the fourth full paragraph distinguishes between the semi-curing of the bismaleimide at a low temperature and subsequent heat curing of the epoxy resin. There is no indication that the epoxy resin participates in the curing at the low temperature.

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8. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Gorodisher et al. Patent No. 5,494,981.

Gorodisher et al. (col. 14, Example 5) shows a B-staged (col. 4, lines 9-11) adhesive (col. 10, line 27) comprising a cycloaliphatic epoxy resin subjected to curing to a B-stage at a lower curing temperature, and a cyanate ester resin that does not cure (col. 4, lines 10-11) during the curing of the epoxy resin but cures at a higher temperature (col. 10, lines 5-22).

9. Claims 1, 3 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshino et al. Patent No. 6,063,649.

Yoshino et al. (Figure 3B, adhesive components 8a and 8b) shows an adhesive composed of first and second adhesive components wherein the first adhesive is cured at a lower curing temperature (col. 3, lines 28-30) and the second adhesive is cured at a different higher curing temperature and does not cure during the curing of the first adhesive (col. 6, lines 63-67). Both the first and second adhesives are prepared from epoxy resins (col. 5, lines 20-26).

"Final rejection is Appropriate).

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10. **THIS ACTION IS MADE FINAL.** The action is properly FINAL because the new grounds of rejection based on Gorodisher et al. and Yoshino et al. are references from the Information Disclosure Statement filed March 5, 2004 in accordance with 37 CFR 1.97(c) and 1.17(p) as well as MPEP § 609 (section B(2), "Information Disclosure Filed After B(1) but <u>Before</u> Mailing of Final Action . . ." and section (a)(ii)

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

(571) 272-1093 (Fax no. (703) 872-9306) Monday to Friday from 9:30 to 6:00 EST

Any administrative inquiries can be obtained by accessing the Patent Application Information Retrieval (PAIR) system. Published applications are available through either private or public PAIR. Unpublished applications are available via private PAIR only. Consult http://pair-direct.uspto.gov or contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

Robert Sellers Primary Examiner Art Unit 1712

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